



UMB2S THRU UMB10S

GLASS PASSIVATED ULTRA FAST RECOVERY BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current - 0.8/1.0 Ampere

FEATURES

Ideal for printed circuit board
 Reliable low cost construction utilizing
 molded plastic technique
 High temperature soldering guaranteed:
 260°C/10 seconds at 5 lbs., (2.3kg) tension
 Small size, simple installation
 Leads solderable per MIL-STD-202,
 Method 208
 High surge current capability
 Glass passivated chip junction
 Green compound(halogen&Sb₂O₃ free)

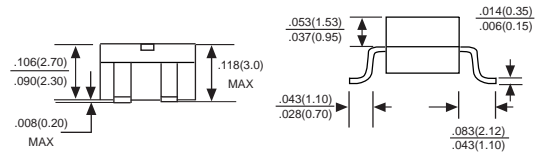
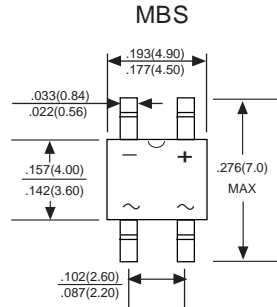
MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750,
 Method 2026

Polarity: Polarity symbols marked on case

Mounting Position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

	SYMBOLS	UMB2S	UMB4S	UMB6S	UMB8S	UMB10S	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	200	400	600	800	1000	V
Maximum average forward rectified current On glass-epoxy P.C.B.(Note1) On aluminum substrate(Note2)	I _{F(AV)}	0.8 1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30					A
Maximum instantaneous forward voltage drop per leg at 0.4A	V _F	1.0	1.4	1.7			V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =125°C	I _R	5.0 500					uA uA
Typical thermal resistance(NOTE 3)	R _{θJL} R _{θJA}	28 85					°C/W
Maximum reverse recovery time (NOTE 4)	t _{rr}	50		75			ns
Operating temperature range	T _J	-55 to +150					°C
storage temperature range	T _{STG}	-55 to +150					°C

NOTES:1.On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads.

2.On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad.

3. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

4. Reverse recovery condition I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.



RATINGS AND CHARACTERISTIC CURVES UMB2S THRU UMB10S

FIG.1 FORWARD DERATING CURVE

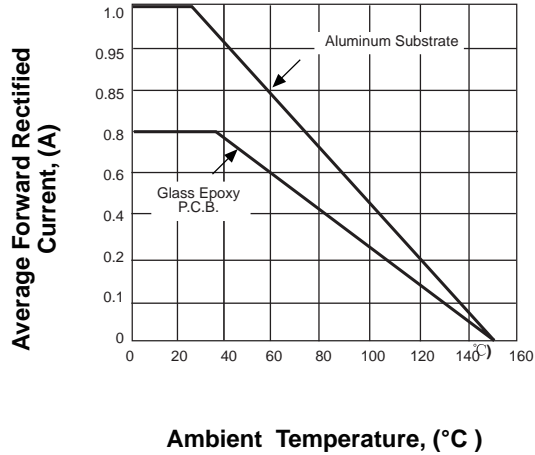


FIG.2 PEAK FORWARD SURGE CURRENT

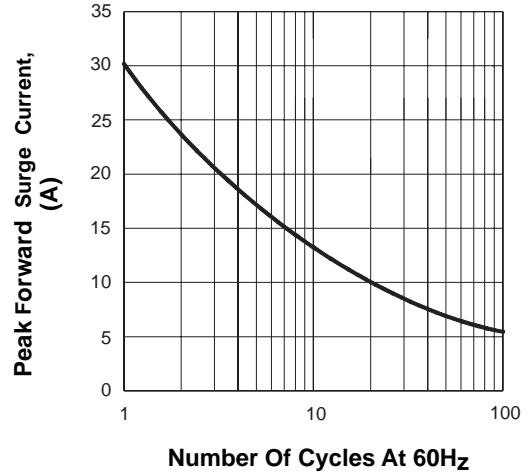


FIG.3 TYPICAL FORWARD CHARACTERISTICS

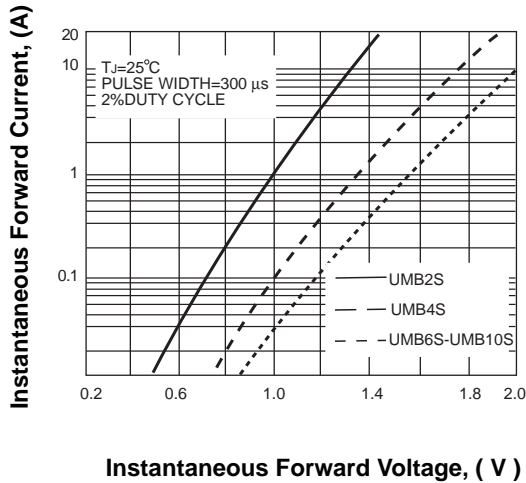


FIG.4 TYPICAL REVERSE CHARACTERISTICS

